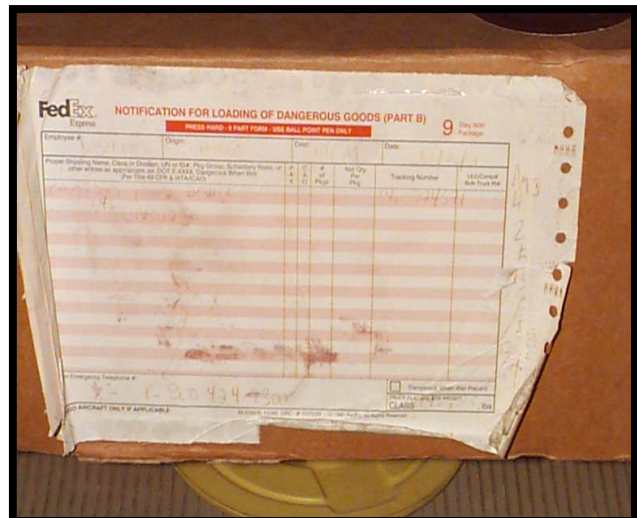


# MSFC Safety Bulletins

## Improper Handling of Explosives



### What Happened?

MSFC Shipping & Receiving, in Building 4471, took delivery of a box of Hazard Class 1.4 explosive bolts. Shipping & Receiving personnel tried for about 6 months to locate the requestor, while the explosive bolts remained in Building 4471. They eventually learned that the bolts had been ordered to support a project that was later cancelled, and the requesting employee had been assigned to temporary duty at another NASA center. The hardware was then moved to a designated explosives storage area at Building 4619, where a controlled environment reduces the risk of accidental ignition.

### Why Was This A Safety Concern?

To protect personnel and property, MSFC relies on all personnel to strictly comply with established procedures for safely dealing with *any and all* explosive materials. MWI 8715.10, "Explosives, Propellants, and Pyrotechnics Program", defines these process control requirements and safe work practices. This incident involved several instances of nonconformance with the Marshall Work Instruction, including the requirement for storing explosives in approved areas only. *If it could happen with these explosive materials, it could happen again with far more hazardous explosives!*

### What Allowed This Situation To Occur?

- The approved MSFC process for the purchase and delivery of explosive materials was not followed.
- The explosive bolts were shipped directly to MSFC Shipping & Receiving, rather than to the designated delivery site for NASA explosives.
- The nonconformities with MWI 8715.10 were not detected and corrected during the procurement and receiving processes.
- MSFC Shipping & Receiving personnel did not know how to contact the Center's certified explosive handling personnel for assistance.

## **How Can We Avoid Similar Situations In The Future?**

- **Make sure that all Center personnel know that MSFC has an approved directive document that gives work instructions for activities involving explosive materials: MWI 8715.10, “Explosives, Propellants, and Pyrotechnics Program”.**
- **Make sure that all Center personnel know that special training and personnel certification are required for employees authorized to handle MSFC explosives.**
- **Make sure that all MSFC personnel whose job responsibilities include requesting and/or procuring explosive materials receive documented training on the MWI 8715.10 requirements that apply to their work.**
- **Make sure that all MSFC Shipping & Receiving personnel receive documented training on the MWI 8715.10 requirements that apply to their work. Emphasize the requirement for keeping all explosives inside approved storage and handling areas, when not in use.**
- **Provide MSFC Shipping & Receiving personnel with contact information for the Center’s certified explosives handling personnel, and instructions to consult those resources when questions and concerns involving explosive materials arise.**